

DATA SHEET 1101-04051

Publish Date: 07.06.2019 | Rev no: 02

PowerMAX Cat.6 U/UTP 23AWG LSZH Cable

PowerMAXTM Cat6 U/UTP Cable - 305mtr 23AWG LSZH Violet - E_{ea} Certified is custom made for the European market and has been Delta certified for use within the European union.

The DINTEK PowerMAX $^{\text{TM}}$ Category 6 solution is guaranteed to exceed ClassE channel specifications as set down in International standards. Our PowerMAX $^{\text{TM}}$ solution comprises Category 6 component compliant patch panels, keystones and patch cords. When combined with DINTEK's E_{ca} certified Category 6 U/UTP cable, an end-to-end channel exists that maximizes data throughput and provides headroom for all future technologies operating beyond one Gigabit.

Applications

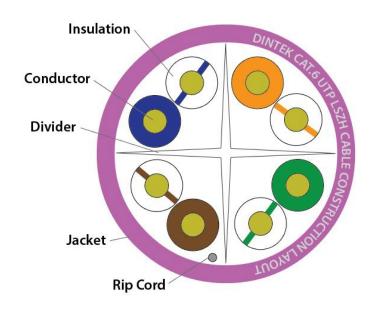
- Voice; T1; ISDN
- 100BASE-T Ethernet (IEEE802.3)
- 155/622Mbps 1.2/2.4 Gbps ATM
- 1000Mbps Gigabit Ethernet
- 550MHz Broadband Video

Standards Conformance

- ISO/IEC11801 2nd edition CLASS E
- ANSI/TIA-568-2.D standard
- CENELEC EN 50173-1, CENELEC
- PoE++ & 4PPoE IEEE 802.3bt level 3 & 4
- EN 50575:2014 including amendment A1:2016
- EN 60332-1-2:2004 including amendment A 1:2015
- EN 13501-6:2014

Independently Verified Certifications

- ETL Verified to ANSI/TIA-568.2-D Cat6 No. 11012547CRT-001
- Delta Cables for use in construction works.
- Reaction to Fire Classification E_{ca} No. 2016-719
- Technical Report DEL TA-1601080, DANAK-19/17248
- EC Cabling product ID: 6123





Cable Features

- Conductor sizes for Cat.6 are set at 23AWG.
- By keeping the gauge size of the conductor larger, there is less heat generation caused and less drop of voltage over distance.
- Exceeds current ANSI/TIA and ISO Standards for performance.
- Capable of handling the latest ver. of power over Ethernet

Performance Statistics

Frequency Mhz	Insertion Loss dB / 100mtrs	NEXT (dB)	
1	2.1	75.0	20
4	3.8	66.3	23
10	6.0	60.3	25
16	7.6	57.2	25
20	8.5	55.8	25
31.25	10.7	52.9	23.6
62.5	15.5	48.4	21.5
100	19.9	45.3	20.1
200	29.1	40.8	18
250	33.0	39.3	17.3



Technical Specifications

Construction

Jonatiaction		
Conductor		
Material		Bare Copper
Wire Size		23AWG
nsulation		
Material		PE
Thickness		0.186mm
Diameter		0.973mm ± 0.05
Colors		Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown
Unaged Elongation (%)		Min. 300%
Unaged Tensile Strength		2400 psi
acket		
Material		LSZH
Thickness		AVG 0.6mm
Diameter		6.1 ± 0.3mm
Color		Violet
		Fire Classification E _{ca}
Physical Ranges		
nsulation		
Min. Tension Strength	Defense Antonia	0400
	Before Aging	2400 psi
Min Florenstier (0/)	After Aging	75% before aging (100°C X 48hrs)
Min Elongation (%)	Defense Antonia	2000/
	Before Aging	300%
	After Aging	75% before aging (100°C X 48hrs)
acket		
Min. Tension Strength		
	Before Aging	1300
	After Aging	85% before aging (100°C X 168hrs)
Min Elongation (%)		
	Before Aging	Min. 100%
	After Aging	50% before aging (100°C X 168hrs)
Cold Bend Test		-20 ± 2°C x 4hrs no. crack
Dielectric Strength		AC 1.7 KV for 2S
Min. Bending Radius		50mm
Max. Pulling Tension		25 lbs
Installation Temperature Operating Temperature		-10°C to +60°C
O 4! T 4		-10°C to +60°C

Conductor Bosistanos	May 0.5 0/400m at 2000
Conductor Resistance	Max. 9.5 Ω/100m at 20°C
DC Resistance Unbalance	Max. 4%
Pair-to-Ground Capacitance Unbalance	Max. 1600 pF/km
Dielectric Strength of Insulation	AC 1.7 KV for 2S
Insulation Resistance Test	Min. 5000 MΩ·Km
Mutual Capacitance	Max. 5600 pF/100m
Impedance 1~100MHz	$100\Omega \pm 15\%$
Impedance 100~250MHz	100Ω ± 22%

DINTEK Electronic Limited

5F., No.8, Ln. 97, Wugong Rd. Xinzhuang Dist., New Taipei City 242

Taiwan (R.O.C.)

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